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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,414	01/30/2002	Darin Denton	031220-202	4746
7590 05/04/2004				
William C. Rowland BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			EXAMINER MOHANDESI, IRAJ A	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/058,414	DENTON ET AL.	
	Examiner	Art Unit	
	Iraj A Mohandesi	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-21, 23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7,9 and 11-21,23 and 24. are rejected under 35 U.S.C. 102(b) as being anticipated by L.Falk US patent 771,468.

Regarding claims 1-7, 9 and 11, Falk'468 discloses a rotary electromechanical device (Fig.1) comprising: a rotor (A), the rotor comprising a hollow hub (four hollow sections, see Fig.2) and a plurality of magnet poles (rotor A has armature inherently has N-S magnetic poles when rotor is provided with current line 62), the hollow hub having at least one aperture at each end to form at least one first passage extending through the hollow hub(see Fig.2 rotor has four apertures), a stator (B, Fig.1 and 2) a sealed casing surrounding the rotor and the stator (J, Fig.1), and at least one second passage extending between the stator and the sealed casing (I, Fig.1) and communicating with each end of the at least one first passage to form a closed path entirely within the sealed casing for cooling air flowing through the rotor (see Fig. 1,2) ,a vanes (S, Fig.1), walls E, Fig.2), the stator surrounds the rotor (see Fig. 2).

Regarding claims 12 and 13—17, Falk'468 discloses a method for cooling a rotary electromechanical device having a rotor (A) with a first aperture at one end of the rotor (let side rotor core opening Fig.1), a second aperture at an opposite end of the rotor

(right side rotor core opening Fig. 1) and a first passage extending through the rotor along a rotational axis of the rotor and connecting the first and second apertures (see Fig 1,2), a stator (B) and a sealed casing surrounding the rotor (J,E) , wherein at least one second passage is formed between the sealed casing and the stator (K , the longitudinal channels ,Fig.2) and communicates with the first and second apertures the method comprising driving air into the first aperture through the first passage and out the-second aperture (see Fig 1,2) and driving air from second aperture through the at least second passage (see Fig. 1 and 2 ,fan S sucking air from first passage “channels k” into the first aperture “right side rotor core opening” and pushing out of the second aperture “ left side rotor core opening “ into the second passage), and proving vanes (S) at the en of the rotor ,and spinning the rotor to drive air through the apertures and the hollow center of the rotor via vanes (see Fig. 1,2).

Regarding claims 18-21,Falk'468 discloses a method for cooling a rotary electromechanical device having a rotor (A) having bearings (F) and a (shaft (G) fixed to the rotor (Fig. 1).

Regarding claims 18-21,Falk'468 discloses a rotary electromechanical device (Fig.1) comprising; a casing (J) a stator (B) ,a rotor (A), the rotor comprising a hollow hub (Fig.1,2) and a plurality of magnet poles (rotor A has armature inherently has N-S magnetic poles when rotor is provided with current line 62) , the hollow hub having at least one aperture at each end to form at least one first passage extending through the hollow hub (Fig.1,2), a shaft (G),secured to the rotor in a non-rotatable manner, and bearings (F) mounted on the casing for supporting the shaft , wherein the casing is

sealed and surrounds the rotor and the stator so that cooling air that flows through the rotor travels through the rotor and then between the stator and the sealed casing (J) in a closed path entirely within the sealed casing (see.Fig.1,2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falk'468 and in view of Tajima 5,811,904.

Falk'468 discloses all limitation of the claimed invention except only a brush less electrometrical device.

Tajima'904 a permanent magnet dynamo electric device ,wherein the device is a brush less machine (column 2,lines 33-47), for the purpose of high speed rotation.

Therefor it would have been obvious to one having ordinary skill in the art at the time the invention was made the combine Falk'468 with a brush less machine having permanent magnet as taught by Tajima'904 for the purpose of high speed rotation.

Response to Arguments

5. Applicant's arguments with respect to claims 1-9,11-21,23 an 24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

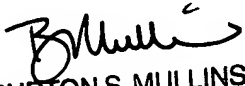
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is 571-272-2028. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IM April 26, 2004


BURTON S. MULLINS
PRIMARY EXAMINER